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EXAMINER	
FRENEL, VANEL	
ART UNIT	PAPER NUMBER
3687	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/914,294	ANDERSON ET AL.	
	Examiner	Art Unit	
	VANEL FRENEL	3687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the application filed on 12/04/08. Claims 23-26 have been newly added. Claims 1-26 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardy et al. (5,287,270) in view of Cool (5,218,632).

As per claims 1 and 22, Hardy discloses a computer-implemented method of generating a bill image in a computer-implemented billing system, the billing system being configured to generate bills relating to the use of a telecommunication network, the method comprising "using at least one computer with accessible input/output and at least one data store to perform the following steps (See Hardy, Fig.1; Col.8, lines 55-68 to Col.9, line 16);"

assigning a charge type identifier (CTI) to each of a number of usage records in said at least one data store (See Hardy, Col.8, lines 63-68); and processing each usage record in dependence on its assigned CTI to produce an electronic bill image (See Hardy, Fig.1; Col.8, lines 55-68 to Col.9, line 16).

Hardy does not explicitly disclose in said at least one data store having a format of the bill image that is dependent on the CTIs of the usage records.

However, this feature is known in the art, as evidenced by Cool. In particular, Cool suggested that the method having in said at least one data store having a format of the bill image that is dependent on the CTIs of the usage records (See Cool, Col.5, lines 16-63; Co1.13, lines 37-49).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Cool within the system of Hardy with the motivation of providing a billing record within the charging system of a stored program controlled communications exchange operated by a telecommunications administration in which charging analysis is performed on each call and data pointers to first and second locations are produced based upon the type of call (See Cool, Col .3, lines 29-34).

As per claim 2, Cool discloses a method according to claim 1 in which a CTI is assigned to each usage record in accordance with a set of rules being executed by said at least one computer (See Cool, 5, lines 16- 63; Co1.13, lines 37-49).

As per claim 3, Hardy discloses a method according to claim 1 or 2, in which the computer processing of each usage record includes the step of assigning a unique sort key to the usage record in said at least one data store dependence on its CTI for

defining the relative position of the usage record in the bill image in said at least one data store (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 4, Cool discloses a method according to claim 2, in which the sort key is generated in dependence on the CTI and a number of fields associated with the usage record (See Cool, Figs 6-7; Col.6, lines 1-40).

As per claim 5, Hardy discloses a method according to claim 3 or 4, in which the sort key is generated in accordance with a set of rules being executed by said at least one computer (See Hardy, Col.24, lines 3-34).

As per claim 6, Cool discloses a method according to any of claims 3 to 5, in which the usage subsequently sorted according to their respective sort keys to create a sorted list (See Cool, Figs 6-7; Col.6, lines 1-40).

As per claim 7, Cool discloses a method according to claim 6, in which the sorted list is processed to generate, when appropriate, and in dependence on the CTIs of the usage records, a number of text inserts to precede or follow a usage record or group of usage records in the bill image (See Cool, Co1.13, lines 36-49).

The motivation for combining the respective teachings of Hardy and Cool are as discussed in the rejection of claim 1 above, and incorporated herein.

As per claim 8, Hardy discloses a method in which each CTI is associated with a position in a text map in said at least one data store, in which a change in position in the text map triggers the generation of a text insert, and in which generating the text inserts comprises the steps of determining the text map position for a usage records CTI, comparing the position with that determined for the previous usage record, and inserting an appropriate text insert if a change in position in the text map occurs (See Hardy Figs 29-1 to 29-2; Col.24, lines 34-68 to Col.25, lines 28).

The motivation for combining the respective teachings of Hardy and Cool are as discussed in the rejection of claim 1 above, and incorporated herein.

As per claim 9, Hardy discloses a method according to claim 8, in which the text map is a tree in said at least one data store hierarchically defining the order in which text inserts are to appear in the bill image (See Hardy Figs 29-1 to 29-2; Col.24, lines 34-68 to Col.25, lines 28).

As per claim 10, Cool discloses a method according to claim 9, in which the text map position for each CTI is a leaf node in the tree (The Examiner interprets program to a contain a leaf node in the tree since it is a part of programming language or software See Cool, Co1.13, lines 1-36).

The motivation for combining the respective teachings of Hardy and Cool are as discussed in the rejection of claim 1 above, and incorporated herein.

As per claim 11, Cool discloses a method according to claim 9 or 10, in which each branch between a parent node and a child node in the tree represents text to be inserted in the bill image (See Cool, Col.13, lines 36-49).

The motivation for combining the respective teachings of Hardy and Cool are as discussed in the rejection of claim 1 above, and incorporated herein.

As per claim 12, Cool discloses a method according to any preceding claim, including the step of generating a bill image record in the bill image for a number of the usage records, the format and content of each bill image record being dependent on the CTI of the respective usage record or usage records (See Cool, Co1.13, lines 36-49).

The motivation for combining the respective teachings of Hardy and Cool are as discussed in the rejection of claim 1 above, and incorporated herein.

As per claim 13, Hardy discloses a method according to claim 12, in which a bill image record is generated for a plurality of usage records having a common CTI (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 14, Hardy discloses a method according to any preceding claim, in which a number of hidden records are generated in the bill image, the hidden records containing data used to create the bill image (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 15, Hardy discloses a method according to claim 14, in which the data contained in the hidden records enables the disassembly, modification and reassembly of the bill image to create a fresh bill image (See Hardy Figs.28-1 and 28- 2; Col.24, lines 3-68).

As per claim 16, Hardy disclose a method further comprising: generating a time line over at least a part of which a discount scheme applies, dividing the time line into a number of segments each of which corresponds to a period during which a respective version of the discount scheme was operative, accumulating charges from usage records for calls made during each segment, calculating an appropriate discount from each of the accumulated charges, generating a usage record for each discount, and subsequently assigning a CTI to each of the generated usage records to create a number of discount usage records (See Hardy, Fig.1;Col.12, lines 52-68 to Co1.13, line 16; Col.24, lines 34-68 to Col.25, line 28).

As per claim 17, Hardy discloses a method in which call usage records are accumulated by call type, the call type being obtained for the call usage records from a mapping of CTI to call type (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 18, Hardy discloses a memory comprising a data structure therein, the data structure defining an electronic bill image having a number of records, each record having an assigned charge type identifier, in which the format of the bill image is

dependent on the charge type identifiers of the respective records, the bill image being created in accordance with the method of claim 1 (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 19, Hardy discloses computer implemented billing system including at least one computer memory storing computer executable instructions for performing the method of claim 1 (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 20, Hardy discloses a system including a computer readable memory storing a set of rules used to assign a CTI to a usage record (See Hardy Figs.28-1 and 28-2; Col.24, lines 3-68).

As per claim 21, Hardy discloses a system including a computer readable memory storing a set of rules used to generate a sort key for usage record (See Hardy, Col.29, lines 50-68; Col.30, lines 35-68).

Claim 22 recites the same features as claim 1, is therefore rejected for the same reasons given in claim 1 above, and incorporated herein.

As per newly added claim 23, Hardy discloses a method further comprising: displaying said electronic bill image for visual viewing (See Hardy, Col.2, lines 17-28).

As per newly added claim 24, Hardy discloses a method further comprising: printing a legible tangible bill in accordance with said electronic bill image (See Hardy, Col.2, lines 17-28).

As per newly added claim 25, Hardy discloses a system further comprising: a display displaying said electronic bill image for visual viewing (See Hardy, Col.2, lines 17-28).

As per newly added claim 26, Hardy discloses a system further comprising: a printer for outputting a legible tangible bill in accordance with said electronic bill image (See Hardy, Col.2, lines 17-28).

Response to Arguments

4. Applicant's arguments filed on 12/04/08 with respect to claims 1-26 have been fully considered but they are not persuasive.

(A) At pages 1-7 of the response filed on 12/04/08, Applicant's argues the followings:

(i) Neither Hardy nor Cool discloses the features of assigning a charge type identifier to each of a number of usage records.

(ii) The combination of Hardy and Cool considered arguendo, still cannot render the claims obvious.

(iii) The combination of Hardy and Cool does not teach the independent claims 1. and 22.

(B) With respect to Applicant's first argument, it is respectfully submitted that He relied upon the clear teaching of Hardy (See Fig.1; Col.2, line 67 to Col.3, line 33; Col.8, lines 63-68 to Col.9, line 16) which correspond to Applicant's claimed feature. Therefore, Applicant argument is not persuasive and the rejection is hereby sustained.

(C) With respect to Applicant's second and third arguments, the Examiner respectfully submitted that obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685,686 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785,788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143,147 (CCPA 1976). Using this standard, the Examiner respectfully submits that he has at least satisfied the burden of presenting a prima facie case of obviousness, since he has presented evidence of corresponding claim elements in the prior art and has expressly articulated the combinations and the motivations for combinations that fairly suggest Applicant's claimed invention. Rather, Applicant does not point to any specific distinction(s) between the features disclosed in the references and the features that are presently claimed. In particular, 37 CFR 1.111 (b) states, "A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the reference does not comply with the requirements of this section." Applicant has failed to specifically point out how the

lanquage of the claims patentably distinquishes them from the applied references. Also, arguments or conclusions of Attorney cannot take the place of evidence. In re Cole, 51 CCPA 919, 326 F.2d 769, 140 USPQ 230 (1964); In re Schulze, 52 CCPA 1422, 346 F.2d 600, 145 USPQ 716 (1965); Mertizner v, Mindick, 549 F.2d 775, 193 USPQ 17 (CCPA 1977).

In addition, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. However, although the Examiner agrees that the motivation or suggestion to make modifications must be articulated, it is respectfully contended that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, In re Bozek, 163 USPQ 545 (CCPA 1969).

The Examiner is concerned that Applicant apparently ignores the mandate of the numerous court decisions supporting the position given above. The issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in In re DeLisle 406 Fed 1326, 160 USPQ 806; In re Kell, Terry and Davies 208 USPQ 871; and In re Fine, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in In re Lamberti et al, 192 USPQ 278 (CCPA) that:

(i) obviousness does not require absolute predictability;

(ii) non-preferred embodiments of prior art must also be considered; and (iii) the question is not express teaching of references, but what they would suggest. Therefore, Applicant's arguments are non-persuasive and the rejection is hereby sustained.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VANEL FRENEL whose telephone number is (571)272-6769. The examiner can normally be reached on 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/
Supervisory Patent Examiner, Art Unit 3687

/Vanel Frenel/

Examiner, Art Unit 3687

February 13, 2009